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ABSTRACT

This paper discusses program implications of research on adolescents. A brief historical review of teenage sexuality is presented in order to put current information in perspective. The present increase in teenage fertility is seen as part of a larger epidemic failure of socialization. A number of recent studies are reviewed and synthesized, especially in relation to the question of whether sex education or contraceptive programs have a reactive effect, by promoting early experimentation and irresponsible sex. Teenage women's method and frequency of contraceptive use is also discussed. Recommendations are given for the kind of clinic service desired by most women, teenage and adult. The value of using available research information about adolescent sexuality for making service and policy decisions is emphasized. (Author/BP)

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Paper presented at the joint meeting of the Washington State Council on Family Planning and the Washington Alliance Concerned with School-Age Parents. Olympia, Washington, September 29, 1977.

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Current research on adolescence and its program implications

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The main topic of my talk is program implications of research on adolescents. I would like to present a summary of recent studies by other researchers and myself bearing on the question of effective educational and service programs. Before getting on to this topic, however, I would like to spend a few moments considering the history of teenage sexuality and fertility. Not the very recent history -- which I am sure you are all too aware of -- but the more distant past. One of the negative consequences of the publicity of the "epidemic" of teenage pregnancy is that it tends to make us forget certain aspects of this history. Dazzled by the recent statistics of increasing rates of activity, pregnancy and abortion, we tend to begin thinking that there was once a time complete teenage celibacy. Such a view is of course an historical myth. There has been a large increase in sexual activity among teenagers in the last ten years. But this increase did not start from zero. As Reiss (1961) reminds us in his analysis of the social context of premarital sexual activity, there have been few, if any societies which have been able to raise even half of one generation of boys to marrying age as virgins. As another historical reminder, examination of the marriage records of colonial American churches indicates much more premarital activity than stereotypes of that period imply. It has been estimated that one third of the names in the registries of some church districts are followed by the initials C.F..

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C.F. stands for "confessed fornicator." The confession to the minister was the price paid by the mother for getting her premaritally-conceived baby baptized. These are but two examples among many which could be given to debunk the myth about the past. The point is that there has never been a period of complete teenage celibacy; only when the ages of fecundity were relatively late for most women and when there were standard methods for ensuring legitimization of children could we afford to overlook the activity.

On this cultural note it should also be stated that recent changes in the attitudes and rates of activity of teenagers are part of a larger change. A change which I think most would agree has been beneficial. The change has produced a new openess in dealing with sexual problems and has enriched the sexual lives of many. The costs of cultural change must be viewed in conjunction with its benefits.

In an important sense, the problem of teenage fertility that we are experiencing is an epidemic failure of socialization. Meaningful adjustments to the problems of adolescent fertility will come through the provision of educational and service programs, not through large scale revivals of a time that never was.

It is important to get this historical perspective. We have in recent years made many appropriate adjustments to the changing cultural and biological nature of adolescence in contemporary America. But there are many changes needed and there is a persistant resistance to such programs. This resistance often holds that the programs are themselves part of the larger problems of moral and social decay. According to this view, the programs accelerate the teenager's interest in sexual

matters and promote promiscuity. In doing so the criticism follows a curious form of Dominoes theory. Such claims must be counteracted and shown for what they are: an overly simple and erroneous analysis of a complex problem.

There have now been completed a number of research programs which allow us to make these conclusions. My own research is one of them. The work I have been involved with can perhaps best be described in comparison to the national studies of Kantner and Zelnick (1972, 1977) which many of you are familiar with. Our study has asked many of the same questions used by Kantner and Zelnick about activity and contraceptive use and attitudes. But, our study differs in two major respects: First, we have attempted to gather more in-depth information. In so doing we spend more time with each of the participants than the opinion-poll approach of Kantner and Zelnick. Also, most of the teenagers in our study are interviewed twice over a year period. The second difference is that of sampling. Because our efforts have been focused on "depth" interviews, we have not attempted to secure a representative national sample. Rather, our work has been conducted in three geographic areas. The metropolitan areas of Atlanta, Georgia, and Washington, D.C., and the extreme northwest area of Washington state. Over all we have talked to approximately 1400 teenagers, about half of each sex. In all major respects where our studies and those of Kantner and Zelnick overlap there has been a convergence of results. For example, we find similar rates of sexual activity and change in activity between years and similar frequency of birth control use. Because of these similarities, we can be more confident in the results of both studies.

A good place to begin discussing our results is by examining the question of whether programs have a reactive effect. Do sex education, contraceptive service, or other programs actually promote early experimentation and irresponsible sex? This has been a question which has persisted ever since the sixties, when concern about the sexual revolution produced attempts to provide contraceptive services to teenagers. To answer this question for sex education, two points must be made clear. First, most sex education is informal. Any effects of formally designed programs must be evaluated within the context of family, friends, community, media and other influences. Second, the label sex education as applied to formal programs covers much territory. Any given course might include development of sexuality, gender role development, interpersonal relations, anatomy and physiology or reproduction, pregnancy, child birth, child care, birth control, abortion, venereal disease, individual responsibility in sexual matters, family relations, and population dynamics. -- or, as recent Planned Parenthood statistics (Alan Guttmacher Institute, 1977) show, none of the above.

Irregardless of content, however, our study and several others do not find any evidence for a reactive effect. Either programs work as they should or they are completely ineffective. We find that the teenagers themselves hold at least a moderately favorable attitude even towards those programs that only minimally qualify for the label sex education. They are grateful for any factual information which is provided by a presumably reliable source. Indeed, we find that there is only one reason why teenagers give low ratings to sex education courses. That reason is the course atmosphere. If the instructor indicates by his or her manner extreme uneasiness, embarassment, or an arbitrary judgemental attitude, the course receives a bad rating.

In sum, we certainly do not find any evidence to support the claim that programs contribute to the problems of socially irresponsible sex. More importantly, our results indicate what programs have the positive effect of encouraging responsible sexual attitudes and behavior -- that is, the programs which are best at bridging the gap between learning and behavior. The programs which do this are those which not only cover anatomy, physiology, and birth control, but also sexuality in the context of the person's life. These are courses which are better labeled family life and which often deal with the decision of sexual involvement as a decision which the person is responsible for. Essentially, such a course offers the individual the oppoutunity to try out her or his decision making of sexual choices. Since the decision making is verbal, it is safe. Role playing is one method which many courses use for doing this. Another method which might be adapted for educational purposes is one which we have used in our research. Each person in our study is asked to complete a "life line." That is, the person is given a line which is marked "birth" on one end and "death" on the other. They are asked to mark where they are on the line now and to then mark important events which have occurred to them and things they hope will happen. The interviewer probes for pertinent details when necessary. Most of the study participants were very appreciative of the oppoutunity to actually examine their life and to relate it to an interested listener.

It must be noted that what we know about effective sex education courses is limited to sophomores and juniors. It is not often that courses below this level allow the opportunity for discussion or even

broach the subject of sexual responsibility. There seem to be very strong common sense and psychological theoretical reasons for this. On this point we can only suggest that both common sense and theory may be wrong.

I wish it were possible to present to you a systematic description of the typical sequence of actual decisions relating to sexual involvement among teenagers. Such is not possible. There exist large individual differences and little systematic information. I can however, summarize several important points from our study.

There is ample evidence that teenagers are making use of birth control to a greater extent than before as a result of the services provided by Planned Parenthood and other organizations. In our study for instance, there is evidence for a 300% increase in contraceptive use at first sexual intercourse over the last three years. We find an increase from 10% to 40% in the proportion of women protected at first intercourse. But, our studies and those recently completed in Indiana by Joel Ager (1977) and Los Angeles by Oscamp and Mindick (1977) show that for those women unprotected at first sexual intercourse, the average length of time between first activity and the seeking of birth control has not changed appreciably in recent years. It remains on the average at about 6-12 months. Furthermore, we know from these studies that even among those who begin sexual activity protected by an effective contraceptive not all will be consistent users during their early career. Ager's Indiana study shows for instance that 20% of those coming to contraceptive clinics were "early drops", i.e., they failed to return for a second visit. Follow up contact by the research team indicated that of these "early drops"

only 10% had continued to use effective forms of contraception. Most of the remainder were classified as "bad" drops, who either were unprotected completely or who had begun using ineffective methods. Another 30%were "late drops" who failed to return to the clinic sometime after the second visit. Thus a total of 50% of the women seeking clinic help failed to continue attendance and in most cases did not use effective contraception.

Our study yields similar results and further implies that contraceptive use is related to the woman's feelings towards her partner and her perception of her own femininity. This is true e pecially for the younger women. At one point, we were rather surprised to note when examining contraceptive histories a regular drop in vigilant contraceptive practice among many of the sexually active women. At about 18 months after first sexual intercourse many women who had been using contraceptives since first sexual intercourse, reverted to a pattern of inconsistant and or infrequent use. This was inexplicable until the contraceptive histories were compared to the women's relationship to their partners. The 18-month slump was found to occur at about the time that the women were breaking up with their first partners. In many cases 18 months represents the length of the first intimate sexual relationship. Thus the woman's birth control practices were related to other aspects of her personal life and were tied to her conceptions of her self. In many cases the women reported a confusion of her social and comtraceptive problems. For instance while many reported that they had been aware of negative side effects of the Pill, they ignored them until they were experiencing a negative social relationship with their partner. The contraceptive

side effects came to symbolize their social difficulties and their worries about their competancy as a woman. It was as if the women decided that the relationship was not worth the side effects.

Our results indicate a number of points about the selection and the effectiveness of program services for teenagers.

We find that while publicity is very helpful in making teenagers aware of clinics and other services it is still personal contact that has the greatest impact on whether the teen will use the service. School visits for instance are very useful for making teens aware of a clinic's existence. However, it is the reccommendation of a friend who has had a satisfying experience with a clinic that is most likely to effect the person. This should not be too surprising. A number of social psychological studies show that the particularized personal experiences of acquaintances have more influence on a wide array of our consumer choices that do mass media advertisements.

In the main the sorts of things which make for a satisfying clinic experience for teenagers are not too dissimilar to those for older women. Our results are in line with the 40-city study recently completed by the Urban-Rural Systems Analysis (1976). Women want high-quality family planning services which are given confidentially, efficiently, with low or no fees, in an atmosphere that is neat and clean. Most importantly, they want warm personal care. It is difficult to reconcile these results with the now thankfully past opinion of some professionals who thought that teens wanted clinics resembling recreation halls, with rock music, posters of the latest movie idols, and pin ball machines.

One special concern of course for younger teens is that this may be their first solo contact with a medical service and therefore, they may have no or erroneous expectations. The younger teens report that they are particularly put at ease by the trappings of professional medical service, i.e., uniforms, appropriate equipment, etc. The younger teenager's inexperience with health service, makes attention to personal care all the more important. Aside from the obvious need for staff who are personally fitted to providing such care a feeling of committment to the individual teen can be encouraged by keeping the number of staff who contact the teen to a minimum. This greatly reduces the feeling of being a non-entity, being shuffled through an uncaring system. Incidentally, we have followed this practice in our research and have been rewarded by a fairly high rate of follow-up interviews. All contacts including appointment scheduling, which the study participant has, are with a single interviewer.

"Rap" groups are a service which are worthy of comment. They are a standard fixture in most clinics and used in a variety of other educational settings. They have been found very useful and are often initiated at the request of clients. When operated effectively they provide an opportunity to safely explore personal feelings and to gain useful information. They become ineffective when they are perceived as a "payment" a meeting which the client must attend before receiving contraceptive services.

One topic which should be included in Rap group discussions or given through some other format are the less effective methods of rhythm and withdrawal. Curiously, clinic and other service providers often

follow a Dominoes theory of their own on these subjects seemingly believing that presentation of this material will encourage the use of these methods over more effective ones. Also, because of time restrictions preference is obviously given to providing information on the more effective methods. However, the facts are that many (at least one third) of active teen women will use rhythm (or some close approximation to it) and withdrawal. Furthermore, it seems that when these methods are used with at least some degree of knowledge they can be effective. Indeed one public health program in our study promotes the use of rhythm over other methods including medical birth control with fairly good results in preventing pregnancy. Plus, there are other benefits to its use by teenagers. Both our studies and those of Harriet Presser (1977) of inner city women in New York City indicate that women who use rhythm are much more knowledgeable about the risks of pregnancy than Pill or IUD users and obviously have a better sense of the operation of the operation of their bodies.

Another topic which deserves greater attention by service providers is that of sexual problems. Studies in Los Angeles by Golden and his assoicates (1977) show that clinic personnel greatly underestimate sexual problems. They assume that few clients have them and fulfill this expectation by not asking about them. The problems most often cited by both teenagers and older women were concerns about being normal, a physically rough partner, lack of communication with partner, and lack of sexual knowledge. Importantly, one third of those interviewed blamed their problems on an inadequate sex education by parents. In addition to these problems teens also state several problems unique to their age group. The three most often cited by teen women were (a) the problem of feeling that sex was something you did solely for your partner; (b) uncertainity about

what a sexual relationship really was; that is, not knowing what commitments, expectations, and feelings to expect; and (c) feeling social pressures to have sexual intercourse. These are all problems and questions of the adolescent years which apply to even those who are not sexually active. Certainly they are ones which could be addressed by not only clinic personnel but also counselors and educators as well as parents and other adults. They demand for their resolution the opportunity to acquire sotial skills and understanding and the provision of equal social support for both those individuals who choose not to become sexually active as well as for those who do.

There has been particularly in the last two years, a renewed resistance to providing service and educational programs for teenagers. This resistance has often been motivated by an attempt to preserve assumed traditional values of sexuality. In a complex pluralistic society such as the United States this certainly represents a valid point of view. However, it is only one among many. The problems of teenage fertility and its control are too important and manifest to be settled by political battles related to the control of school boards or to become entangled with unrelated issues. The time is imperative for a new arrangement to be forged between those who oppose teen programs and those who support them. I submit that an important basis of this arrangement should be the increasing body of systematic information we have regarding the nature and conditions of adolescent sexuality and the services needed for the increased control of fertility.

Ager, J. and Agronow, S. J., Consequences of Dropping Out of a Teen Contraceptive Program; paper presented at the American Psychological Association, 1977.

Golden, J. S., Golden, M., Price, S., and Heinrich, A., The Sexual Problems of Family Planning Clinic Patients as Viewed by the Patients and the Staff. Family Planning Perspectives, 1977, 9,1, 25-29.

Oscamp, S., and Mindick, B., On-going research report presented at symposium on adolescent contraception, pregnancy and pregnancy resolution. American Psychological Association, 1977.

Urban and Rural Systems Associates, Improving Family Planning Services for Teenagers. Final report, DHEW, 1976.

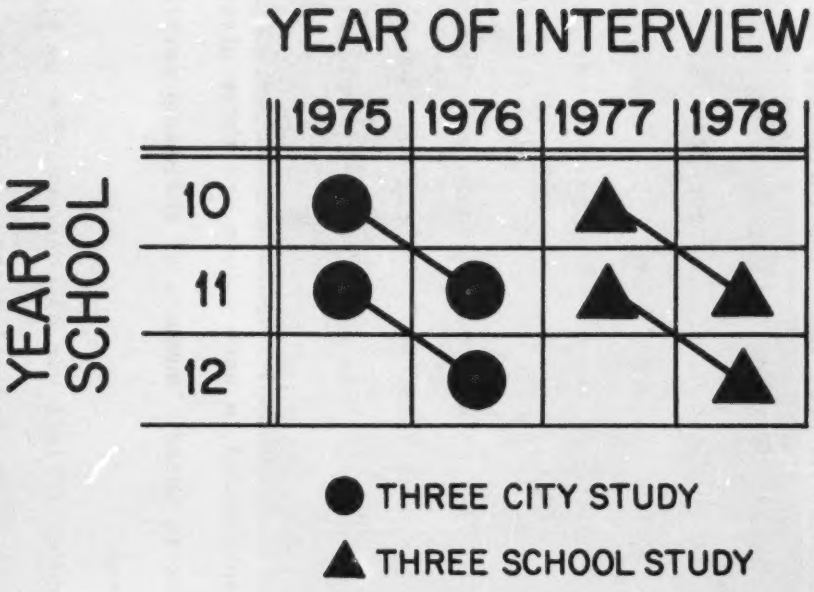
Adolescent Growth and Development Study
February 1978
Psychology
Western Washington University
George Cvetkovich and Barbara Grote

These tables are an update and correction of results first presented in October, 1977. All statistics are either means or percentages. A schematic diagram of our research is presented on page two. The three-city study (which was coordinated by the APHA)* was conducted with participants from Washington, D.C., Atlanta, GA, and Bellingham, WA. Race at each site was pproximately: D.C.: 60% white, 40% black; Atlanta: 50% white, 50% black; and Bellingham: 99% white, 1% other. In the second year this was actually a two-city study with no interviews conducted in Atlanta. The three-school study is being conducted with participants from Bellingham and the surrounding county. In both the three-city and three-school studies, second-year participants (1976 and 1978) are (or will be) follow-up first-year people plus others who will be interviewed for the first time.

Numbers of individuals represented in each column are those given on the top of page 3 unless otherwise noted. Numbers of follow-up participants in 1976 are given in parentheses.

All birth control use figures reflect use of contraception by <u>either</u> the male or female partner. Use of any medical method, condoms, or correct and consistent use of contraceptive foam, rhythm, or withdrawal was considered to be contraception.

*Other investigators in the 1975-1976 study were: E. James Lieberman and Sarah Brown (American Public Health Association), Warren Miller (American Institutes of Research), Paul Poppen (George Washington University), and Fred Crawford (Emory University).



STUDY DESIGN

	1977 Bellingham Only		1975 Bellingham and DC		1975 Bellingham, DC, Atlanta		
	Female	Male	Female	Male	Female	Male	Site
	N=238	N=241	N=122 *N=86	N=79 *N=53	N=118	N=101	Bellingham
			N=105 *N=45	N=27 *N=16	N=93	N=77	DC
			*Follow-up Participants		N=162	N=147	Atlanta
Age	15.9	16.1	17.8	17.8	16.6	16.7	Bellingham
			17.0	17.4	16.5	16.4	DC
					16.9	16.6	Atlanta
Current Grade or Highest Completed	10.5	10.5	11.7	11.7	10.8	10.8	Bellingham
			10.7**	11.3**	11.1	10.8	DC
					11.4	11.0	Atlanta
Father's Education	13.7	14.1	13.5	13.7	13.7	13.1	Bellingham
			14.4	15.0	14.6	14.7	DC
					14.2	13.7	Atlanta
Father's Occupational Status*	3.8 (N=227) 1= high status 7= low status	3.5 (N=234)					

*Warner, W. L. Social Class in America. NY: Harper Torch Books, 1949. pp 140-1.
**the average grade of follow-up participants was Females=11.7 Males=11.9
the average grade of new participants was Females=9.9 Males=10.5

	1977 Bellingham Only		1976 Bellingham and DC		1975 Bellingham, DC, Atlanta		
	Female	Male	Female	Male	Female	Male	Site
Mother's Education	12.8	13.4	13.2	13.0	13.2	12.7	Bellingham
			13.3	14.3	13.8	13.8	DC
					13.3	12.7	Atlanta
Mother's Occupational Status*	4.2 (N=165)	3.6 (N=157)					
	1= high 7= low						
Work Status Mother	1: 50%	57%	29%	43%	34%	44%	
	2: 16%	7%	15%	16%	24%	16%	
1: full time	3: 6%	2%	22%	26%	0%	0%	Bellingham
2: part time or student	4: 0%	1%	0%	0%	0%	0%	
	5: 28%	33%	34%	15%	42%	40%	
3: unemployed							
4: retired			1: 45%	42%	44%	56%	
5: housewife			2: 19%	35%	12%	12%	
			3: 29%	19%	8%	8%	DC
			4: 0%	0%	0%	0%	
			5: 7%	4%	36%	25%	
					1: 46%	47%	
					2: 21%	10%	
					3: 4%	9%	Atlanta
					4: 0%	1%	
					5: 29%	33%	
Work Status Participant	1: 1%	1%	26%	42%	2%	3%	
	2: 42%	45%	42%	33%	43%	51%	Bellingham
1: 30-40 hours per week	3: 57%	54%	32%	25%	55%	46%	
2: 15-30 hours per week or summers			1: 5%	4%	2%	3%	
			2: 33%	33%	46%	44%	DC
3: none			3: 62%	63%	52%	53%	
					1: 2%	3%	
					2: 21%	38%	Atlanta
					3: 77%	54%	

Note: The large differences above in work statuses in 1976 between Bellingham and DC are probably due to the time of year in which interviews were conducted. More Bellingham participants were interviewed during the early summer months and thus were likely to be working full time.

*Warner, W. L. Social Class in America. NY: Harper Torch Books, 1949. pp 140-1.

	1977 Bellingham Only		1976 Bellingham and DC		1975 Bellingham, DC, Atlanta		
	Female	Male	Female	Male	Female	Male	Site
1: No family disruptions: live with both parents	1: 66%	71%	59%	75%	63%	80%	
2: Family disruptions:	2: 34%	29%	41%	25%	37%	20%	
2a: separation/ divorce	a: 13%	16%	23%	18%	25%	14%	Bellingham
2b: death	b: 17%	11%	13%	4%	8%	4%	
2c: other	c: 4%	2%	5%	4%	4%	2%	
			1: 47%	81%	63%	66%	
			2: 53%	19%	37%	34%	
			a: 32%	15%	24%	22%	DC
			b: 14%	0%	11%	11%	
			c: 7%	4%	2%	1%	
					1: 62%	52%	
					2: 38%	48%	
					a: 28%	27%	Atlanta
					b: 8%	18%	
					c: 2%	3%	
Educational plans: 1=less than high school	5.1	5.5	4.8	5.0	4.5	4.5	Bellingham
2=high school 3=tech/vocational			4.9	5.7	5.6	5.6	DC
4=jr. college, terminal degree					5.6	5.0	Atlanta
5=some college 6=4 year college 7=professional or grad degree							

	1977 Bellingham Only		1976 Bellingham and DC		1975 Bellingham, DC, Atlanta		
	Female	Male	Female	Male	Female	Male	Site
Planned Age of Marriage	24.0 (N=225)	25.3 (N=224)	23.2 (N=103)	25.1 (N=76)	23.1 (N=111)	24.4 (N=97)	Bellingham
			26.3 (N=84)	25.7 (N=24)	25.9 (N=71)	26.5 (N=61)	DC
					23.5 (N=150)	24.6 (N=135)	Atlanta
Planned Age at First Child	25.5 (N=201)	27.3 (N=205)	24.7 (N=95)	26.5 (N=73)	25.0 (N=111)	26.4 (N=89)	Bellingham
			25.2 (N=94)	27.1 (N=4)	26.6 (N=78)	27.2 (N=73)	DC
					25.0 (N=147)	25.6 (N=136)	Atlanta
Planned Number of Children for Those Desiring Children	2.8 (N=201)	2.4 (N=205)	2.4 (N=95)	2.4 (N=73)	2.7 (N=111)	2.3 (N=89)	Bellingham
			2.8 (N=94)	2.9 (N=4)	3.1 (N=78)	2.8 (N=73)	DC
					2.7 (N=147)	2.5 (N=136)	Atlanta
Contraceptive Knowledge	(not asked in 1977)		Bellingham and DC combined		Bellingham, DC, and Atlanta combined		
1=mentioned 2=recognized 3=not recognized	IUD		1.3	1.7	1.5	2.2	
	Withdrawal		1.9	1.7	2.1	2.0	
	Diaphragm		1.5	1.8	1.7	2.1	
	Rhythm		1.7	1.7	1.9	2.2	
	Foam, Cream, Jelly		1.4	1.5	1.5	1.8	
	Condom		1.3	1.1	1.3	1.1	
	Pill		1.1	1.1	1.1	1.2	

	1977 Bellingham Only		1976 Bellingham and DC		1975 Bellingham, DC, Atlanta		
	Female	Male	Female	Male	Female	Male	Site
* Sex Knowledge % Correct	88.7%	85.3%	96.7%	93.7%	89.6%	85.7%	Bellingham
Q: Pregnancy can occur with the very first sexual intercourse.			86.7%	92.6%	81.8%	87.0%	DC
					88.8%	76.0%	Atlanta
	48.4%	35.0%	65.8%	58.9%	53.0%	38.4%	Bellingham
Q: Pregnancy cannot occur with the withdrawal method.			52.4%	42.3%	56.5%	32.9%	DC
					56.9%	47.2%	Atlanta
	80.2%	89.2%	99.2%	96.2%	96.6%	89.9%	Bellingham
* Q: Chances of pregnancy are reduced if the woman is not sexually excited during intercourse.			93.3%	92.0%	88.2%	90.5%	DC
					91.3%	81.5%	Atlanta
	68.9%	74.0%	100.0%	98.7%	100.0%	97.0%	Bellingham
* Q: Pregnancy will probably not occur if intercourse is only once in awhile.			94.3%	100.0%	92.5%	94.7%	DC
					95.7%	89.7%	Atlanta
	65.3%	44.8%	58.8%	64.1%	63.6%	47.4%	Bellingham
Q: The safe time to have intercourse is the days just before and during the menstrual period.			46.1%	57.7%	52.2%	47.9%	DC
					61.4%	64.1%	Atlanta
Q: Chances of pregnancy are reduced by douching, exercising, or taking hot baths after intercourse.	68.9%	65.2%	not asked		not asked		Bellingham

*These are shortened versions of the sex knowledge questions. Exact wording available on request.

*In 1977 the wording of these questions was changed because of the high percent answering correctly in 1975. In 1977 questions were as stated. In 1975 and 1976 the questions were: "A woman can get pregnant even though she does not get excited during sexual intercourse." and "If you only have sex once in a while, you will not get pregnant."

	1977 Bellingham Only		1976 Bellingham and DC		1975 Bellingham, DC, Atlanta		
	Female	Male	Female	Male	Female	Male	Site
The following figures are based only on responses of non-virgins	N=97	N=107	N=71	N=48	N=56	N=63	Bellingham
			N=73	N=17	N=44	N=50	DC
					N=69	N=105	Atlanta
% of Total ever Sexual Intercourse	40.8	44.4	57.4	61.5	47.5	62.4	Bellingham
			69.5	63.0	47.3	64.9	DC
					42.6	71.4	Atlanta
Age at first Intercourse	14.8	14.6	15.7	15.3	15.3	15.1	Bellingham
			15.2	14.9	15.1	13.6	DC
					15.5	12.7	Atlanta
Frequency of Intercourse (last 3 mo.s) 0=never 1=1-2 times/ 3 mo.s 2=several times/mo. 3=1/week 4=several times/week	1.4	1.0	2.0	1.9	1.4	1.3	Bellingham
			1.8	1.4	1.5	1.9	DC
					1.5	2.1	Atlanta
# partners 1=one 2=two 3=three or four 4=five to ten 5=eleven or more	2.8	2.1	2.3	3.1	2.0	2.3	Bellingham
			2.3	2.9	1.9	2.8	DC
					2.1	3.6	Atlanta

	1977 Bellingham Only		1976 Bellingham and DC		1975 Bellingham, DC, Atlanta		
	Female	Male	Female	Male	Female	Male	Site
% of Non-virgins ever Pregnant or Partner Pregnant	18% (freq=18)	5% (freq=5)	21% (freq=15)	16% (freq=8)	17% (freq=9)	10% (freq=6)	Bellingham
			30% (freq=22)	18% (freq=3)	20% (freq=9)	4% (freq=2)	DC
					15% (freq=10)	8% (freq=8)	Atlanta
Outcomes of Pregnancy	1: 33%	25%	6%	0%	22%	0%	
	2: 48%	63%	41%	30%	44%	83%	
1: spontaneous abortion	3: 5%	12%	18%	20%	33%	0%	Bellingham
	4: 9%	0%	29%	40%	0%	17%	
2: legal abortion	5: 5%	0%	6%	10%	0%	0%	
3: live, kept with marriage	(freq=21)	(freq=8)	(freq=17)	(freq=10)	(freq=9)	(freq=6)	
4: live, kept without marriage			1: 16%	0%	0%	0%	
			2: 56%	100%	56%	100%	
5: live, not kept			3: 0%	0%	0%	0%	DC
			4: 28%	0%	44%	0%	
			5: 0%	0%	0%	0%	
			(freq=25)	(freq=3)	(freq=9)	(freq=2)	
					1: 20%	0%	
					2: 60%	50%	
					3: 0%	25%	Atlanta
					4: 20%	0%	
					5: 0%	25%	
					(freq=10)	(freq=8)	

	1977 Bellingham Only		1976 Bellingham and DC		1975 Bellingham, DC, Atlanta		
	Female	Male	Female	Male	Female	Male	Site
Always Birth Control	26%	28%	23%	20%	32%	29%	Bellingham
			27%	41%	25%	21%	DC
					26%	17%	Atlanta
Average % of Birth Control use last 12 months*	62.3% (N=89)	56.3% (N=92)	69.9% (N=57)	82.0% (N=45)	not asked		Bellingham
			82.5% (N=71)	82.7% (N=17)	not asked		DC
Note: Months during which female was pregnant were excluded from calculations.					not asked		Atlanta
Birth Control use last 3 mo.s 1=always (100%) 2=almost always (90-99%) 3=usually (50-89%) 4=sometimes (1-49%) 5=never (0%)	2.5 (N=68)	2.6 (N=60)	2.0 (N=48)	1.8 (N=40)	2.5 (N=40)	2.5 (N=44)	Bellingham
			1.7 (N=62)	1.5 (N=16)	2.5 (N=39)	2.4 (N=41)	DC
					2.0 (N=62)	3.4 (N=97)	Atlanta
Birth Control use since first Intercourse 1=always (100%) 2=almost always (90-99%) 3=usually (50-89%) 4=sometimes (1-49%) 5=never (0%)	not asked		2.7	2.4	not asked		Bellingham
			2.3	2.2	not asked		DC
					not asked		Atlanta

* Individual scores were computed by using the following formula:

$$\frac{(FBC_1) + \ldots + (FBC_{12})}{(FSI_1) + \ldots + (FSI_{12})}$$

where FSI_n = frequency of sexual intercourse for month n

where FBC_n = frequency of birth control use for month n